

MATERIAL SAFETY DATA SHEET

I. GENERAL INFORMATION

ENFORCER PRODUCTS, INC. P. O. BOX 1060 CARTERSVILLE, GA. 30120	MANUFACTURER'S PHONE NUMBER: (770) 386-0801 24 HOUR EMERGENCY NUMBER: 1-800-255-3924	HAZARD RATINGS: HEALTH_1 REACTIVITY_0 FLAMMABILITY_1 PERSONAL PROTECTION_A CHRONIC HAZARD_YES_
PRODUCT NAME: ZEP® COMMERCIAL KITCHEN FOAMING CLEANER (Formula code: 0222)		EPA REG. NO.: N/A
PREPARED BY: S. SHELKOP		DATE: MARCH 23, 2000

II. INGREDIENTS

PRINCIPAL COMPONENTS	CAS NUMBER	PERCENT	OSHA PEL	ACGIH TLV	RTECS #	OSHA/ACGIH STEL
ISOPROPYL ALCOHOL ** IPA; DIMETHYLCARBINOL; 2-PROPANOL	67-63-0	<10.0	400 PPM	400 PPM	NT8050000	500 PPM
ACETONE	67-64-1	<10.0	750 PPM	750 PPM	AL3150000	1000 PPM
** BLEND OF [ISOBUTANE;	75-28-5	5-15	1000 PPM	800	TZ4300000	
& [PROPANE;	74-98-6				TX2775000	
& [N-BUTANE	106-97-8				EJ4200000	

III. PHYSICAL DATA

BOILING POINT: 185 - 215° F	SPECIFIC GRAVITY: 0.978	VAPOR PRESSURE (mm Hg.): N/D
PERCENT VOLATILE BY VOLUME: >99%	VAPOR DENSITY: N/D	EVAPORATION RATE (Water = 1): 1.0
pH: (CONCENTRATE): 10.2	SOLUBILITY IN WATER: COMPLETE	
APPEARANCE & ODOR: CLOUDY, COLORLESS, LIQUID HAVING A MINT FRAGRANCE.		

IV. FIRE & EXPLOSION DATA

FLASHPOINT (Method used): NONFLAMMABLE (CSMA Flame Extension)	AUTOIGNITION TEMPERATURE: N/D	FLAMMABLE LIMITS: N/D
LEL: N/D	UEL: N/D	EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL AND FOAM.
SPECIAL FIRE FIGHTING PROCEDURES:	WEAR SELF-CONTAINED, POSITIVE-PRESSURE BREATHING APPARATUS.	
UNUSUAL FIRE & EXPLOSION HAZARDS:	DIRECT WATER ONTO INTACT CONTAINER TO PREVENT BURSTING.	

V. REACTIVITY HAZARD DATA

STABILITY: [X] STABLE UNSTABLE	CONDITIONS TO AVOID: HEAT
INCOMPATIBILITY (Materials to avoid):	STRONG OXIDIZING AGENTS.
HAZARDOUS POLYMERIZATION:	WILL OCCUR X WILL NOT OCCUR
HAZARDOUS DECOMPOSITION PRODUCTS:	CARBON DIOXIDE, CARBON MONOXIDE AND OTHER UNIDENTIFIED ORGANIC COMPOUNDS.

VI. HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY:	INHALATION [X]	INGESTION [X]	SKIN ABSORPTION [X]	EYE [X]	NOT HAZARDOUS []
--------------------------	----------------	---------------	---------------------	---------	-------------------

SPECIAL NOTE: MSDS DATA PERTAINS TO THE PRODUCT AS DISPENSED FROM THE CONTAINER. ADVERSE HEALTH EFFECTS WOULD NOT BE EXPECTED UNDER RECOMMENDED CONDITIONS OF USE (DILUTED) SO LONG AS PRESCRIBED SAFETY PRECAUTIONS ARE PRACTICED.

ACUTE EFFECTS OF OVEREXPOSURE:

INGESTION: OVEREXPOSURE CAN RESULT IN MILD NARCOTIC EFFECTS, INCLUDING FLUSHING, HEADACHE, DIZZINESS, AND NAUSEA

SKIN CONTACT: EXPOSURE MAY BE IRRITATING TO SKIN.

INHALATION: EXPOSURE MAY BE IRRITATING TO UPPER RESPIRATORY TRACT. ACCUMULATION OF HARMFUL QUANTITIES OF VAPOR IS PRECEDED BY SEVERE IRRITATION WHICH MAKES OVEREXPOSURE UNLIKELY. OVEREXPOSURE CAN RESULT IN MILD NARCOTIC EFFECTS, INCLUDING FLUSHING, HEADACHE, DIZZINESS, AND NAUSEA.

EYE CONTACT: EYE IRRITANT. EYE CONTACT MAY PRODUCE STINGING, BURNING, INFLAMMATION, AND IN EXTREME CASES MAY PRODUCE CORNEAL DAMAGE.

CHRONIC EFFECTS OF OVEREXPOSURE:	REPEATED OR PROLONGED, SKIN CONTACT MAY PRODUCE SOME DRYNESS OF SKIN. CHRONIC EFFECTS FROM ALCOHOL VAPORS ARE RARE AND WOULD RESULT FROM SEVERE, PROLONGED, AND REPEATED CONTACT, WHICH IS USUALLY PRECLUDED BY IRRITATION. IN MOST EXTREME CASES, NARCOSIS, UNCONSCIOUSNESS, AND DEATH COULD RESULT. RELEVANCE OF THESE STUDIES OR EXPOSURE LEVELS THAT MIGHT PRODUCE THESE EFFECTS IN HUMANS HAS NOT BEEN ESTABLISHED.
----------------------------------	--

CARCINOGENICITY:	NTP? N/A	IARC? N/A	OSHA REGULATED? N/A
------------------	----------	-----------	---------------------

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:	INGREDIENTS IN THIS PRODUCT MAY AGGRAVATE EXISTING SKIN, EYE OR RESPIRATORY DISORDERS.
--	--

EMERGENCY FIRST AID PROCEDURES:

INGESTION: IF THIS PRODUCT IS SWALLOWED, DO NOT INDUCE VOMITING. IF VOMITING OCCURS, KEEP HEAD BELOW HIP LEVEL. IF VICTIM IS CONSCIOUS, GIVE PLENTY OF WATER TO DRINK. GET EMERGENCY MEDICAL ATTENTION IMMEDIATELY.

SKIN CONTACT: IMMEDIATELY FLUSH CONTAMINATED SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS.

INHALATION: MOVE EXPOSED PERSON TO FRESH AIR. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION PROMPTLY.

EYE CONTACT: IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES, OCCASIONALLY LIFTING UPPER AND LOWER LIDS. GET MEDICAL ATTENTION AT ONCE.

VII. CONTROL AND PROTECTIVE MEASURES

EYE PROTECTION: USE OF TIGHT-FITTING SAFETY GLASSES OR GOGGLES IS STRONGLY RECOMMENDED, ESPECIALLY WHEN WEARING CONTACT LENSES.

RESPIRATORY PROTECTION (specify):	AVOID INHALATION OF SPRAY MISTS, AND DO NOT DIRECT SPRAY TOWARD PEOPLE. IF VENTILATION IS INADEQUATE, WEAR A PROPERLY FITTING MSHA OR OSHA-APPROVED RESPIRATOR.
-----------------------------------	---

SKIN PROTECTION: THE USE OF NEOPRENE, NITRILE OR LATEX GLOVES IS STRONGLY RECOMMENDED, ESPECIALLY FOR PROLONGED CONTACT.

VENTILATION:	PROVIDE LOCAL EXHAUST/VENTILATION AS NEEDED TO KEEP CONCENTRATION OF VAPORS BELOW EXPOSURE LIMITS (PEL/TLV).
--------------	--

OTHER PROTECTION: WASH PRODUCT FROM CLOTHING AND SKIN. USE GOOD HOUSEKEEPING PRACTICES.

VIII. SPECIAL PRECAUTIONS	
HANDLING AND STORING PROCEDURES:	DO NOT STORE AT TEMPERATURES ABOVE 120°F OR IN DIRECT SUNLIGHT. DO NOT PUNCTURE OR INCINERATE CONTAINER. DO NOT BREATHE SPRAY MISTS OR VAPORS. KEEP PRODUCT OUT OF EYES. AVOID PROLONGED CONTACT WITH SKIN.
RELEASE OR SPILL PROCEDURES:	LARGE SPILLS ARE UNLIKELY DUE TO PACKAGING. SPILL MAY BE ABSORBED ON AN INERT ABSORBENT MATERIAL (E.G. CAT LITTER OR ZEP-O-ZORB), AND PLACED IN A SUITABLE CONTAINER FOR DISPOSAL. WASH AREA THOROUGHLY WITH A DETERGENT SOLUTION AND RINSE WELL WITH WATER..
WASTE DISPOSAL METHOD:	PRODUCT IS CONSUMED IN USE. DO NOT CRUSH, PUNCTURE OR INCINERATE SPENT CONTAINERS. LARGE NUMBER OF AEROSOL CONTAINERS MAY REQUIRE HANDLING AS A HAZARDOUS WASTE, BUT IN MOST STATES TOTAL HAZARDOUS WASTE QUANTITIES LESS THAN 220 LBS. PER MONTH MAY ALLOW DISPOSAL IN A CHEMICAL OR INDUSTRIAL WASTE LANDFILL. CONSULT LOCAL, STATE AND FEDERAL AGENCIES FOR THE PROPER DISPOSAL METHOD IN YOUR AREA.
OTHER PRECAUTIONS:	KEEP THIS AND ALL CHEMICALS OUT OF REACH OF CHILDREN AND PETS.

IX. ADDITIONAL INFORMATION	
PROPER DOT SHIPPING NAME:	CASES (<66 LBS) OF GALLONS OR SMALLER MAY BE SHIPPED ORM-D CONSUMER COMMODITY
BIODEGRADABILITY:	N/D
EMPTY CONTAINER HANDLING:	WARNING! EMPTIED CONTAINER RETAINS PRODUCT RESIDUE. OBSERVE ALL PRECAUTIONS EVEN AFTER CONTAINER IS EMPTIED. KEEP EMPTIED CONTAINER CLOSED TIGHTLY.
ADDITIONAL MANUFACTURER WARNINGS: TSCA STATUS: EXEMPT RECOMMENDED HAZARD SUMMARY (DEFINED BY 29 CFR 1910.1200): IMMEDIATE HEALTH HAZARD. NOTE: "NI " MEANS NOT INDICATED.	
OTHER PRECAUTIONS AND COMMENTS:	THE INFORMATION AND STATEMENTS IN THIS MATERIAL SAFETY DATA SHEET ARE BELIEVED TO ACCURATELY REFLECT THE SCIENTIFIC EVIDENCE USED IN MAKING THE HAZARD DETERMINATION, BUT IS NOT TO BE CONSTRUED AS A WARRANTY OR REPRESENTATION FOR WHICH WE ASSUME LEGAL RESPONSIBILITY. ADDITIONAL INFORMATION MAY BE NECESSARY OR DESIRABLE DEPENDING ON PARTICULAR, EXCEPTIONAL OR VARIABLE CONDITIONS OR CIRCUMSTANCES OF USE OR STORAGE OR BECAUSE OF LOCALLY APPLICABLE LAWS OR GOVERNMENT REGULATIONS. THEREFORE, YOU SHOULD USE THIS INFORMATION ONLY AS A SUPPLEMENT TO OTHER INFORMATION AVAILABLE TO YOU AND MUST MAKE INDEPENDENT DETERMINATIONS OF THE SUITABILITY OF THE INFORMATION FOR YOUR PARTICULAR CIRCUMSTANCES OR CONDITIONS AND OF THE COMPLETENESS OF THE INFORMATION AVAILABLE FROM ALL SOURCES TO ASSURE BOTH THE PROPER USE OF ALL THE MATERIAL DESCRIBED HEREIN AND THE SAFETY AND HEALTH OF EMPLOYEES.
THIS INFORMATION COMPLIES WITH OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200.	

***** END OF REPORT *****